

## ***ADEQ Water Quality Division (WQD) SFY15 EOY Assessment***

The following summary reviews ADEQ's performance for SFY15. The evaluation is based on commitments in the workplan, reports/submittals and considered information gathered during ongoing program conference calls.

### **Administration**

**Revenue:** ADEQ Water Quality Division (WQD), hereafter "ADEQ", lost fiscal/general fund support from the state legislature in 2008 and relies heavily on federal funds to operate. Federal funds (\$10M+) represent more than 50% of ADEQ's operating budget. ADEQ receives approximately \$4.8M annually through several EPA grants to implement water programs, excluding the State Revolving Funds. ADEQ began collecting AZPDES permitting fees in FY11 and is moving forward with operator certification fees and evaluating fees for design review, and a drinking water administrative fee.

WIFA is a separate state agency charged with implementing the Clean Water and Drinking Water State Revolving Funds. Fees are collected by WIFA as part of the loan process. ADEQ uses Drinking Water State Revolving Fund (DWSRF) setasides (\$4.6M) and had used Water Infrastructure Financing Authority (WIFA) fees (up to \$5M) to supplement grant funds. Use of WIFA fees to offset general funds was a concern to EPA as it limited WIFA's ability to meet administrative costs and provide technical assistance to water and wastewater systems. Over the last 6 years, we urged and have worked with ADEQ to reduce and eliminate the transfer of WIFA fees.

**Workplan and Grants:** The bulk of federal funding is awarded annually through a Performance Partnership Grant (PPG) which combines CWA 106, PWSS and NPS funds. ADEQ also receives a separate monitoring grant and NPS projects grant. ADEQ develops an annual integrated workplan covering all activities and commitments for federally and non-federally funded tasks, and is based on a SFY (July 1- June 30). The draft workplan is reviewed by the relevant program leads and managers (Water and Enforcement), and followed by discussion/negotiations (in some cases, formal meetings). Previous year activities and commitments are considered to determine technical capacity and program successes and priorities. Priority setting amongst core program activities is often the focus of discussions as well as collaboration across programs. The integrated workplan provides a comprehensive look at the work being performed by ADEQ. EPA and ADEQ have implemented several changes over the last few years to improve reporting and accountability, and ADEQ is in the process of converting the integrated workplan into a database format that will improve EPA and ADEQ's ability to track water quality program efforts.

**Staffing:** The ADEQ WQD has approximately 125 staff and is constantly recruiting to fill priority vacancies.

**Rule Making:** All agencies in Arizona have been bound by a Governor's rules moratorium since 2009. The Governor may grant an exception if the regulatory change lessens or eases a regulatory burden. This has hindered implementation, but recently, ADEQ has sought exceptions

to the moratorium for minor water quality standard changes, an amendment to the biosolids program under the NPDES program delegation, and the drinking water total coliform rule.

**EPA Oversight:** EPA and ADEQ's partnership is formalized in the Arizona Accord. The Accord is an agreement describing our relationships and joint efforts to protect human health and the environment. This supplements MOAs associated with program approval and delegation. EPA program leads hold regular calls with ADEQ program counterparts as well as official midyear and end-of-year reviews. EPA Water Division and EPA Enforcement Division work together to oversee program implementation.

The workplan defines outputs and reporting. Review of outputs is by the program. Separate accountability tools are used as well to assess progress, e.g. monthly ICIS reports on permit issuance, or routine program calls. With multiple funding sources, the various grant projects officers also coordinate efforts. Although the annual SRF grant is awarded to WIFA, the SRF PO coordinates with the ADEQ PPG PO and program leads to ensure effective accountability.

## **Clean Water Act**

### **Ambient and 106 Monitoring**

The Monitoring Unit is responsible for collecting water quality data for Arizona's streams, lakes, and groundwater. Water quality monitoring is intended to characterize baseline water quality conditions, support the 303(d) and 305(b) assessment process, evaluate compliance with water quality standards (WQS) and provide data to support the development of new and revised WQS and TMDLs. ADEQ uses a probabilistic monitoring design and covers the state in a 5-year cycle by monitoring in either the warm water (below 5000 feet) or cold water (above 5000 feet) sites each year.

In SFY15, ADEQ met or exceeded almost all of their ambient and 106 monitoring commitments. ADEQ completed 98% of their ambient stream sampling targets, 100% for fish, 145% for lakes, and 182% for groundwater. Consistent with EPA's request, SFY15 sampling focused on warmwater sites, and samples were taken from three streams which ADEQ had never sampled before. Document deliverables were sent to EPA on or before target dates, including the FY15 sampling assurance plan, FY16 ambient monitoring plan, groundwater basin reports for Avra Valley and Gila Bend, and a revised quality assurance plan based on EPA comments. Chlorophyll a and periphyton were sampled in 27 rivers and streams, with total nitrogen and total phosphorus collected quarterly at all sites, to support development of the narrative nutrient standard for streams. A recreational monitoring program was further developed by meeting with county health departments, identifying highly recreated areas, and developing policies and procedures to address unsanitary beach conditions. Intermittent stream monitoring was slowed by delays in hiring and solar panel procurement, but random site selection was completed, and sensors were bought and deployed in a pilot test.

In SFY16, EPA looks forward to continuation of the ambient monitoring program, and targeted projects including continued nutrient monitoring for rivers and streams, further development of the recreational monitoring program, full deployment of the intermittent stream study, development of a strategy for monitoring to support the 50% waterbody improvement performance measure, and site selection for the National Wetland Condition Assessment.

## **Water Quality Standards**

The Surface Water Section (SWS) is responsible for water quality standards (WQS) and policy development. ADEQ water quality standards (WQS) deliverables are impacted by an executive order rules moratorium that prohibits state agency rulemaking, unless the governor's office consents based on a justification such as reducing regulatory burden. ADEQ held a triennial review stakeholder meeting in September 2014, and requested a moratorium exemption in February 2015, which was granted by September 2015, but limited revisions to, "...amend errors or clarify language from the 2009 rules changes." After this delay, the proposed revisions, with some changes, were then public noticed on September 18, 2015 and the rulemaking is now targeted for December 2015 in the SFY16 Workplan. ADEQ's WQS work is also affected by the lack of a single WQS point of contact since the standards unit manager retired and her staff were absorbed into the Ambient Monitoring Group.

Finalization of ADEQ's Antidegradation Implementation Procedures was rescheduled from SFY14. Although the SFY15 final output report states that the procedures were finalized, ADEQ staff report that the document was not yet finalized with the directors signature. They did note that the 2008 draft is generally similar to the 2015 draft, and provided the current version of the unsigned document. ADEQ also did not meet the commitment to finalize the Lake Narrative Nutrient Standards by June 2015, citing that additional information is still needed from their contractor. ADEQ did complete one surface water program development output by holding a meeting with Department of Health Services and Arizona Game and Fish to determine the public process when issuing fish consumption advisories.

In SFY16, EPA looks forward to more timely progress in the water quality standards program, particularly Arizona's finalization of their 2014 triennial review. Additionally, EPA will confirm the finalization of and review ADEQ's Antidegradation Implementation Procedures; and provide support and review of ADEQ's narrative lake nutrient criteria and implementation documents.

## **Water Quality Assessment and Total Maximum Daily Load (TMDL) Development**

The TMDL and Assessment Unit is responsible for assessing statewide water quality data and developing the Arizona 303(d) list of impaired waters and 305(b) integrated report (IR). In SFY15, ADEQ progressed in developing and finalizing their 305(b) Integrated Reports and 303(d) Lists (hereafter, "report/list"). ADEQ committed to finalization of the 2012-2014 report/list, identification of candidate waters for SP-12 or W-10 measures, and initiation of the 2016 report/list. The 2012-2014 report/list targets were met, with 1-2 month delays, and approved by EPA in August 2015. Identification of candidate waters was completed within the target month, but the submittal of success stories wasn't concluded by the end of the fiscal year due to additional comments received. The 2016 report/list is being addressed on an ongoing basis, with smaller batches of data being uploaded more often to prevent a backlog and keep the project on pace.

ADEQ's TMDL commitments are evaluated with semi-annual status table updates, and include submitting TMDL reports to EPA for final approval, completing first public notice for TMDLs, continuing data collection and analysis for TMDLs, monitoring remedial activities on Measure

W waterbodies, tracking Measure 5 waters performance, coordinating with NRCS on NWQI effectiveness monitoring, completing TMDL implementation plans, and determining status of Phoenix Area Urban Lake Management Plans. Outputs were delayed for various reasons, particularly the workload created by the Watson Lake TMDL appeal.

In SFY16, EPA looks forward to further development of the integrated report and list of impaired waters. EPA also looks forward to completion of the traditional TMDLs worked on in SFY15 (Queen Creek, Pinto Creek, Middle Gila), along with continued data collection and analysis (Mule Gulch). Lastly, EPA looks forward to further integration of watershed plan, TMDL development, and nonpoint source program planning activities, such as the completion of Water Quality Improvement Plans including WIP and TMDL elements, TMDLs/alternative plans/data summaries.

### **NPDES Permitting**

The principal task of the two permitting units is timely issuance of new and reissued permits to facilities subject to the CWA.

#### *Highlights:*

In SFY15, ADEQ continued to issue good quality permits in a timely manner, trying hard to meet the national performance target of 90% current. Over the last couple of years, ADEQ has been successfully reducing the time needed to reissue permits. In SFY15, even though there were more permits to reissue, they were able to reduce the time to reissue a permit by 35%. Their initial calculated time to complete reissuance of a permit was 427 days and their goal is to be able to reissue a permit within 213 days.

ADEQ reported in their SFY15 output report that 95% of permits are current; however, as in SFY14, it was difficult to confirm this result because the permit status information in ICIS is still not up-to-date. EPA estimated ~82% current based on permit status data provided by ADEQ and ICIS, which has slipped from the 89% current calculated in SFY14. According to the SFY15 output report, ADEQ reissued 26 individual permits and denied 1 permit.

A major accomplishment of the Stormwater & General Permits Unit was final issuance of the ADOT MS4. ADEQ also reviewed and responded to a total of 40 of the 49 combined MS4 Phase I and Phase II annual reports, conducted MS4 training for Phase I and Phase II stakeholders, and through its contractor, completed 8 Phase II MS4 audits, meeting the SFY15 workplan target.

Additionally, both permit units (the Water Quality AZPDES Individual Permits Unit and Water Quality Stormwater & General Permits Unit) successfully coordinated with the Watershed Protection Unit to ensure TMDLs were written to ensure effective implementation in permits, so that water quality improvement can be realized.

#### *Concerns:*

ICIS Permit Status Information - As in SFY14 and indicated above, the ICIS database is still out of date regarding permit status information. In addition, most of the general permits are not listed in the database. During our EOY discussion, ADEQ committed to addressing these

inconsistencies and have already begun addressing some major/minor classification discrepancies. EPA encourages ADEQ to update this information so that ADEQ can receive national credit for their accomplishments.

**Phase II MS4 General Permit** - The permit expired in 2007, and ADEQ explained in the SFY14 end of year meeting that they were waiting until the 2010 Census to bring in more permittees; however, the planned issuance of this permit was listed in the SFY12, SFY13, SFY14, and SFY15 workplans. ADEQ committed to issuing the Phase II MS4 general permit in SFY15, but has been fiercely challenged by permittees. In order to address permittee concerns, ADEQ will be holding another stakeholder meeting, issuing another public notice with a possible hearing, and plan to issue the final permit in February 2016. This will likely impact the schedule for reissuance of the Multi-sector general permit (MSGP), which is included in the SFY16 workplan.

**Phase II MS4 Audit Findings** - The results of the 8 MS4 audits conducted in SFY15 supported the previous year's findings that many smaller MS4 Phase II programs demonstrate widespread non-compliance with current permit obligations.

Looking forward, the priorities for the SFY16 include addressing the above concerns, reissuance of the De Minimis general permit and the MSGP, seeking approval under the NPDES delegation for a change to the biosolids program, and streamlining the variance approval process. For Phase II MS4 non-compliance identified in SFY15, AZDEQ will evaluate audit results, annual reports and demonstrated efforts by Phase II permittees. Compliance orders will be considered for those who continue to neglect permit requirements.

### **Non Point Source (NPS) Program and Project (CWA 319) Management**

The Watersheds Protection Unit in the Surface Water Section has the majority of the Nonpoint Source Program (NPS) under its scope, whereas, other parts of ADEQ's Water Division uses some of the funds to staff NPS related work. The Program is comprised of program implementation and project oversight. Program implementation is based on a State Management Plan (SMP) which establishes goals, objectives, activities, and milestones to accomplish the goals. Accomplishments are detailed in an Annual Nonpoint Source Program Report and an end of year integrated Water Division report. Project oversight includes the solicitation for project proposals, awarding projects, and oversight of projects to improve water quality.

The Watersheds Protection Unit continues to lead the way amongst Region 9 states on working with partners and program integration. The agreements and MOU's in place to leverage and align federal and state resources is tremendous. EPA anticipates that ADEQ will show significant results in the next two to three years on meeting its performance measure of "showing improvement in 50% of the states monitored waters."

State fiscal year 2015 was the first year of implementing the NPS Management Plan. This year EPA was pleased to have the Watersheds Unit supervisor come to EPA and present FY15 accomplishments. The information exchange and networking opportunities which occurred were well worth the travel investment by ADEQ. EPA observed during the end of year review that the benchmarks for meeting the 4 Goals laid out in the Plan are in the range of 72%-94% on target.

Missed targets in the Plan are understood to be behind and are within reason for delay. ADEQ has demonstrated a commitment to get on track. Furthermore, EPA would like to work with ADEQ on completing the EPA Performance Measure reporting for SP-12 and WQ-10.

ADEQ has a well thought out plan for tracking ADEQ's performance measure in place: 1) Waterbody is removed from 303(d) list, 2) Order of magnitude decrease in pollutant concentrations, or 3) Increase in Water Quality Index Score (WQI). The WQI is intriguing and EPA looks forward to learning more about this. EPA also anticipates reviewing the protection criteria as it will help unlisted waters that should need immediate restoration work.

At the end of year meeting, EPA/ADEQ identified 5 action items:

1. To use and share ADEQ's MOU's and coordination techniques with federal agencies to our other states.
2. ADEQ should consider direct and groundwater intakes in prioritization for source water protection and as it relates to the developing protection criteria.
3. EPA and ADEQ will work on streamlining reporting requirements for performance measures.
4. ADEQ will host a presentation on the Water Quality Index.
5. ADEQ's cooperative agreement with NRCS is exceptional and will be used as an example for other states.

All in all, the Watersheds Protection Unit continues to strive to meet its performance measure, checking that the goals are being worked towards, and that the supporting milestones are completed. EPA looks forward to more great work from ADEQ as it moves towards showing improvement in water quality in Arizona.

### **Wetlands and 401**

EPA reviewed the SFY15 Final Output EPA regarding 401 CWA actions. There is one Task 1.3.2: CWA 401 Certification Review of Federal Permits and Licenses. The deliverables require a table of the 401 certifications processed including the type of permit, project name, action and date of action. ADEQ complied with Task 1.3.2 and provided a table of 401 actions.

In order to improve interagency coordination and collaboration, a new condition was added to the SFY16 grant requiring ADEQ to contact EPA prior to 401 certification on projects where EPA has identified water quality concerns through written or phone correspondence to ADEQ.

### **Border**

ADEQ operates and maintains an Office of Border Environmental Programs (OBEP) located in Tucson, AZ. They are responsible for border region and transboundary issues for all media activities along the US-Mexico Border Region.

ADEQ has provided EPA and other stakeholder timely reports on fugitive wastewater flows into Arizona from Nogales, SON, and updates on exceedances of allowable loadings for metals and other contaminants that can affect the operational efficiency of the Nogales International

WWTP. OBEP has also been a strong advocate for the need to implement pretreatment programs in Nogales, SON that are needed to protect WWTP operations.

In SFY15, EPA noted the impact of the lack of engineering support for wastewater and drinking water projects in Arizona, following the departure from ADEQ of the border engineer in the previous fiscal year. The ADEQ border engineer coordinated internally within ADEQ to ensure that design, permitting and compliance requirements and concerns were considered in project deliverables and discussions. In addition, as designs for WWTP upgrade projects in Willcox and Douglas have proceeded, there has been a lack of ADEQ expertise during critical stages of design review that has benefitted projects in the past. EPA also notes that with ADEQ's reduced presence at project meetings, ADEQ has not been able to maintain the same level of fruitful and mutually beneficial relationships with small border communities that it did in the past.

### **CWA Enforcement and Compliance**

**Inspections:** The Water Quality Compliance Section (WQCS) and the Southern Regional Office Compliance Program Unit (SROCU) are responsible for all field work for the Division. ADEQ set a target of inspecting 50% of the major AZPDES permitted facilities (35 of 71) and 20% of the minor facilities (18 of 89) in SFY15. EPA's 2014 Compliance Monitoring Strategy (CMS) requires the inspection of majors once every two years (50%) and all minors inspected once in a 5 year cycle (20%). ADEQ inspected 46 major facilities and 27 minor facilities, thus exceeding the CMS goals for both major and minor facilities. Additionally, ADEQ and SROCU responded to 22 citizen complaints related to the Clean Water Act, resulting in 18 non-routine inspections. ADEQ still intends to pursue a risk-based ACMS (subject to compliance with EPA's 2014 CMS) in response to the AZ Auditor General's Report citing non-compliance by minors.

ADEQ exceeded its stormwater inspection targets again this year of 50 industrial and 50 construction (30 Phase 1 and 20 Phase 2) inspections in SFY15 by conducting 51 industrial, 62 Phase 1, and 49 Phase 2 construction inspections. Although EPA's CMS sets goals of 10% of all industrial facilities and 5-10% CMS goals for construction facilities, EPA has agreed to lower commitments given the resource limitations at ADEQ. The CMS goals for the stormwater programs also include audits of MS4s. See the NPDES Permitting Section of this report for a discussion of SFY15 progress in the MS4 program.

AZ has 100 CAFOs statewide covered by AZ APP permits and 2 subject to AZPDES permits. ADEQ exceeded its SFY15 target of 1 CAFO inspection by conducting 2 CAFO inspections of its permitted and unpermitted facilities. ADEQ exceeded its SFY15 inspection targets for the biosolids program (5 POTWs and 6 land application facilities) with 5 POTWs and 8 land application facilities. ADEQ also exceeded its target of 28 annual report reviews submitted under the biosolids rule by conducting 38 reviews.

**Pretreatment Program:** Arizona has delegated authority to implement the federal pretreatment regulations. Core regulatory duties are as follows:

- 1) Review all annual and semi-annual reports submitted by POTWs with approved pretreatment programs.
- 2) Conduct pretreatment compliance audits (at least once every five years for each approved POTW pretreatment program).

- 3) Conduct pretreatment compliance inspections (at least twice every five years for each approved POTW pretreatment program).
- 4) Perform annual inspections of POTWs with SIU-oversight-only pretreatment programs (at least once every five years for each program).
- 5) Review and approve pretreatment program submittals and modifications.

Additionally, there is a specific PPG target for ADEQ to support pretreatment work in the Ambos Nogales border region, as industrial wastewater from Mexico has caused or contributed to NPDES permit violations at the Nogales International Wastewater Treatment Plant (NIWTP). During SFY15, ADEQ continued to work with wastewater representatives in Nogales, Arizona, and Nogales, Sonora, to support implementation of the new pretreatment conditions in the NPDES permit issued to the NIWTP.

During SFY15, Arizona met all of their pretreatment targets. Specifically, ADEQ met its inspection targets (8 compliance inspections and 5 POTW SIU-oversight only inspections), auditing targets (4 pretreatment audits of approved pretreatment programs), and report review targets (20 annual/semi-annual reports).

In SFY16, EPA looks forward to ADEQ's continued progress in pretreatment commensurate with its target numbers. ADEQ is evaluating ways to increase efficiency in its programs, including in pretreatment inspections and audits, and EPA looks forward to continuing the conversation with ADEQ about how pretreatment oversight responsibilities might be streamlined or targeted to maximize resources while continuing to meet state and federal goals.

**Data Management and Reporting:** Just as in SFY13 and SFY14, ADEQ did not meet its commitment to enter discharge monitoring reports and state inspection and enforcement actions into EPA's ICIS-NPDES national database in SFY15. Due to data programming issues, ADEQ stopped flowing NPDES data into ICIS as of mid-November 2012. In the interim, ADEQ continued to enter permit and monitoring information into its state databases.

Without NPDES data in ICIS, EPA's view of discharger compliance data and state activities is severely limited. In particular, EPA cannot generate the QNCR history of major facilities in Significant Non Compliance (SNC). As a stop-gap measure, ADEQ did generate a QNVR of majors from its Azurite database. However, without the ICIS QNCR, compiling a list of SNCs would require significant resource-intensive manual efforts, which neither ADEQ nor EPA could provide. ADEQ did submit its quarterly compliance reviews and reports to EPA on time.

**Enforcement:** In SFY15, ADEQ issued 5 Administrative Orders, closed 6 Administrative Orders, issued 44 Notices of Opportunity to Correct (NOCs) and Notices of Violation (NOVs) and closed 37 NOCs and NOVs. ADEQ continues to use informal enforcement tools and anticipates new processes established by the LEAN exercise will improve overall compliance efforts.

Major facilities are flagged as being in SNC if they have acute or chronic effluent limit violations that exceed EPA's criteria for magnitude and duration. Facilities may also be flagged as SNC for late submittal of discharge monitoring reports. Given ADEQ's data management issues discussed



above, neither ADEQ nor EPA could generate a list of SNC violations during SFY15. Flagging SNC violations is an important tool for targeting enforcement to the highest priority violations. State enforcement response to SNC violations is a critical measure that EPA uses in our oversight of State NPDES enforcement programs

*Concerns:*

ADEQ has an on-going data management and reporting issue that once again affected EPA's ability to oversee the SFY15 Work Plan progress. ADEQ's inability to flow data into ICIS from mid-November 2012 has significantly impacted EPA's ability to monitor and evaluate ADEQ's Surface Water Compliance and Enforcement program as detailed in Task 1.4.3 of the integrated SFY15 Work Plan. The requirement for NPDES permit, compliance monitoring data and enforcement data entry is required as part of the program approval and described in the MOA. ADEQ has been aware of the need for updated data transfer protocols since 2009 and has been working on it intermittently since then. Since February 2013, EPA HQs has provided contract help to ADEQ with virtually unlimited expert technical assistance, which ADEQ's IT Department has used in their efforts to program systems for flowing NPDES data to EPA's ICIS database. Despite this available assistance, project completion deadlines established by the IT Department have not been realistic, as evidenced by extended project completion dates with almost every bi-weekly status report. The initial project completion date of June 30, 2013 was last officially extended by ADEQ to January 17, 2014 with no actual completion by that date, despite being reportedly 95% complete since the week of August 9, 2013.

Additionally, EPA's ability to conduct the AZ State Review Framework, an enforcement-led multi-media evaluation of compliance using FFY13 data, was severely impacted. ADEQ missed the February 19, 2014 data "freeze" HQs deadline; the data was finally manually "frozen" on June 16, 2014, but it proved to be unreliable with many errors. During the SRF site visit the week of July 7, 2014, problems with the data, such as the number of facilities actually in SNC, remained.

Given the above chronology, EPA could not effectively oversee the SFY13-15 Work Plan progress. As a result of this chronic lack of substantial progress, two programmatic grant conditions regarding data management and reporting were included in the SFY16 Work Plan:

P8. Arizona will complete all upgrades and successful installation of the Nodes to start the flow of data from Azurite to ICIS Production by **September 30, 2015**. Arizona will provide EPA with written notification upon completion.

P9. Arizona will flow accurate and complete data from Azurite to ICIS Production by **October 31, 2015**. At least 95% of permit limits and DMR data for major facilities shall be entered. Arizona will use standardized or Ad-Hoc ICIS reports to verify the completeness of this data starting November 1, 2012 onwards. Arizona shall generate and provide to EPA electronic copies of these reports by October 31, 2015 and upon request.

If ADEQ does not meet these completion dates, EPA has the option to withhold or delay payment as authorized under 40 CFR 31.43. As of the SFY15 EOY discussions (September 17 and 18, 2015), ADEQ expects to meet both grant condition deadlines, thus enabling EPA to once

again use ICIS data to monitor and evaluate ADEQ's Surface Water Compliance and Enforcement program as detailed in Task 1.4.3 of the integrated SFY16 Work Plan.

### **Safe Drinking Water Act**

EPA Region 9's Drinking Water Management Section (EPA) conducted the annual end of year program evaluation of the Arizona Public Water System Supervision (PWSS) Program I on September 9, 2015. This program evaluation covers ADEQ Water Quality Division (WQD) Drinking Water (DW) and Compliance Sections' activities for State Fiscal Year 2015 (SFY15), July 1, 2014 through June 30, 2015, funded in part by SDWA Section 1443(a) Grants to States and Section 1452(g) State Revolving Loan Funds. The FY15 allotment to the Arizona PWSS program of \$1.432M was reduced by \$10,000 for the recession of FY15 federal funds. A number of state sources also fund the ADEQ DW Section's work, including: Vehicle Emission Inventory, Water Quality Fee Fund (WQFF), Monitoring Assistance Program (MAP) fee fund and the 10% set-aside of the Drinking Water State Revolving Fund. (DW-SRF). ADEQ uses \$1.7 M from the Vehicle Emission Inventory to fund the work under the PWSS program. ADEQ must request this funding from the State Legislature every year. ADEQ continues to develop new fee programs including fees for Operator Certification.

ADEQ DW Section had no major organizational changes in SFY15. The DW Monitoring & Protection Unit continues to have at least two vacant rule specialist positions. The DW Programs Unit is actively looking to increase support to the Capacity Development and Operator Certification programs by filling 2 vacancies. The Compliance Section re-organized and reduced the number of Field Service Units from two to one, compiling the 10 vacancies into a single unit. The Unit supervisor has drinking water and wastewater inspectors for municipal and private systems. Not all vacancies will be justified and/or filled.

### **Rule Development**

The DW Section committed to submitting a complete primacy revisions crosswalk in their FY2013 workplan for all the analytical requirements of 40 CFR 141 and 142. The DW Section's work with ADHS on this effort was curtailed last fiscal year due to the lack of Section manager. As a result, the DW Section completed no work on the incremental primacy crosswalks for Public Water System (PWS) Definition, Arsenic and Radionuclides. Instead, DW Section has focused on revised Total Coliform Rule (RTCR) development. The DW Section will continue to complete the incremental primacy crosswalks for Stage 1 and Stage 2 Disinfection Byproduct rules originally due to EPA in FY14.

### **Data Management**

**Current system:** The DW Section currently uses SDWIS/State Version 3.22 and FedRep 3.4 and reports conducting compliance determination using SDWIS/State modules for all rules except the Surface Water Treatment and Public Notification rules. This should help ensure accurate compliance determinations and consistent violation posting. However, SDWIS/State version 3.3 and FedRep version 3.5, required for RTCR implementation, have been released for use with both Test and Production datasets and with a variable RTCR implementation date setting. This means that the DW Section could install these updated versions now for use when

they are ready to begin testing and training on RTCR data management functionality in advance of the 4/1/2016 compliance date.

**System upgrades:** The DW Section reports planning to use the new Compliance Monitoring Data Portal (CMDP), which is scheduled to be available for user testing in early 2016 and for full deployment in late 2016. EPA OGWDW has postponed SDWIS/Prime development in favor of CMDP development, and the DW Section reports planning to delay transition to SDWIS/Prime until it proves fully capable and all add-on applications are functional. However, the DW Section could begin basic transition planning (assigning a project team and lead, reviewing the transition plan template, developing a data migration plan, etc.). ADEQ reports lacking resources to participate in SDWIS Prime development workgroups led by EPA, although ADEQ's participation could help ensure that SDWIS/Prime meets ADEQ's requirements.

**Upload data quality status:** The DW Section has achieved a low error rate for quarterly inventory and actions data uploads to SDWIS/Fed and has had no data errors for samples uploads for several years. For inventory, the DW Section reports prioritizing correction of treatment data ID and treatment plants without treatments. Such facility flow errors are now low, although numbers are somewhat variable. ADEQ has few of the locational data and active-but-unreported facility errors common in other state programs. For actions, the DW Section has reduced historically high duplicate violation errors to near minimal levels.

**Persistent data quality issues:** The DW Section reports prioritizing data quality issues including the number of open-ended violations older than five years, which are mostly CCR and LCR violations; these numbers have dropped from 361 last year to 108, which is great progress but leaves a bit more to accomplish. The DW Section also reportedly reviews water systems serving over 3300 population that have not had 90th percentile lead levels reported to SDWIS/Fed in the last three years, to determine if the missing data results from non-compliance, data entry issues, or problems with reporting the data to EPA. For the now-ended 2012-2014 sampling period, 15% of Arizona PWSs do show no 90<sup>th</sup> percentile lead sampling, while the number is 19% for the 2013-2015 sampling period currently nearing its end. The DW Section has previously committed to documenting required violation data not reported to SDWIS/Fed and assessing barriers to full reporting; EPA Region 9 has not seen the resulting documentation.

**OGWDW measures:** According to the OGWDW Data Quality Matrix available from the SDWIS Reporting Services function in CDX, ADEQ has a very high .9994 score on geocoordinate data reporting and a perfect score on two other inventory data measures and a similar .9994 score on violations deleted after submittal to SDWIS/Fed. On timeliness of violation reporting, ADEQ's almost 12% issue rate brings the overall Matrix score down to .9803, leaving some room for improvement. On the OGWDW Sanitary Survey completion measure, ADEQ has a 97% score. In sum, these measures and the others mentioned previously indicate good data quality overall.

## **Rule Implementation**

EPA is concerned about the resource challenges the DW Section has faced in the last half of FY15. The DW Section has not had a rule specialist to support proper data entry or compliance determinations, and they report that they are not able to make compliance determinations in a

timely manner for the Synthetic and Volatile Organic compounds (SOCs and VOCs) under the Phase II/V chemical contaminants rule, Radionuclides Rule, Stage 2 Disinfection Byproducts Rule or the Stage 1 Disinfection Byproducts Rule. EPA found twenty three PWSs to be out of compliance with the Arsenic rule. ADEQ confirmed eleven PWSs remain out of compliance with no formal enforcement action to put the systems on the path to compliance. EPA notes that all these systems have had compliance issues since 2007 after the new MCL took effect.

ADEQ has extended the county delegation agreements for Maricopa and Pima counties through year 2050. The counties perform on-site inspections/sanitary surveys and address compliance with formal enforcement actions on systems for which ADEQ delegates authority. ADEQ in partnership with the counties completes sanitary surveys to meet National Program measure SDW-1(a) for sanitary surveys. The state has completed 97% of the required number of sanitary surveys for FY15 to meet National Program measure SDW-1(a) for sanitary surveys performed at a community water system every three years. ADEQ's Compliance Section has reduced the "total" number of priority systems on the ETT over the course of the year. The Compliance Section has not been able to address all the systems that were priority systems on the July 2014 ETT to meet their deliverable in the SFY15 workplan. The SFY15 Enforcement Targeting Tool (ETT) performance is shown in the table below.

#### **SFY15 Enforcement Targeting Tool (ETT) performance**

	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>
<b>Total # of Sys on ETT &gt;=11</b>	96	61	51	43
<b>Total PWS removed from ETT in SFY15</b>	-	46	56	59
<b>Remaining PWS on ETT &gt;=11 from SFY15 ETT commitment</b>	96	50	32	25

#### **Outreach, Training and Emergency Response**

ADEQ continues to provide rules training events throughout the state. In FY16 they are expanding their workshop to target an audience with operators and managers. They are focused training on operator certification preparation along with the drinking water regulations. ADEQ will be focused on implementing the RTCR. Systems will be reaching out to ADEQ for more clarity and would benefit having an individual to contact directly. ADEQ WQD staff provides compliance assistance to systems with little support from third party technical assistance (TA) providers. EPA encourages ADEQ to use external resources including those TA providers for which the EPA TA grant allows states to set priorities.

ADEQ has not invested in Security and Emergency Response training events since the elimination of separate federal grant funding for water security activities in FY2012. Operators across the state depend on EPA, FEMA and the Maricopa County Waterborne Disease Taskforce sponsored training for emergency response preparedness activities. ADEQ will continue to rely on AZ Water/Wastewater Agency Response Network (WARN) and other utility based networks to respond to large wild fires and other emergency events.

#### **Laboratory Certification and Quality Assurance (QA)**

TestAmerica Laboratories Inc. has replaced Arizona Department of Health Services (ADHS) as the principle state laboratory through a contractual agreement valid until 2019. ADHS remains the laboratory certification agency for drinking water labs within the state of Arizona. EPA Region 9's QA office is planning to create a template document for help states update their QAPrPs. ADEQ does not have changes to the Drinking Water Quality Assurance Program Plan (QAPrP) planned for in future workplans.

### **New and Existing System Capacity Development**

The Capacity Development program has not changed significantly since ADEQ first developed it in 1999. Through their partnership with the Arizona Water Infrastructure Finance Authority (WIFA), ADEQ provides Operational Technical assistance to systems. As a partner in the Rural Water Infrastructure Committee, ADEQ reviews potential TA funding resources with federal, state and third party TA providers. Through System Evaluations, ADEQ is supporting systems to come into compliance or develop more sustainable operation practices that maintain compliance with the SDWA. The number of system evaluations, the outputs of the existing system capacity development program, have steadily declined over the years. The DW Section is actively working with their WQD director's office on development of a Small Water System Compliance strategy which may results in changes to the state capacity development strategy and increase outputs of this program.

#### *Findings and Recommendations:*

1. The Drinking Water Section needs to complete the primacy revision packages for Revised Total Coliform Rule, Stage 1 D/DBPR, Stage 2 D/DBPR, and Primacy crosswalk of ADHS sections of Arizona Administrative Code.
2. Small water System Compliance strategy is a priority for SFY 16. EPA would like this strategy to have at a minimum a targeted number or a list of individual systems it will bring into compliance and milestone dates will show how the strategy is being implemented.
3. Compliance determinations should be made in a timely manner for SOCs and VOCs under the Phase II/V rule, Radionuclides Rule, Stage 2 Disinfection Byproducts Rule or the Stage 1 Disinfection Byproducts Rule. The DW Section should find a way to justify a rule specialist position to support proper data entry and compliance determinations.

### **Source Water Protection**

The Drinking Water Monitoring and Protection Unit manages Arizona's efforts to prevent contamination of ground and surface sources of drinking water.

#### *Highlights:*

FY15 was another productive year for the ADEQ Source Water Protection (SWP) Program. With the completion of 30 SW Protection Plans, the Program achieved both of its EPA PAM FY15 targets: (1) number and percentage of community water systems (CWS) where risk to public health is minimized by source water protection and (2) number and percentage of population served by those CWSs. Program priorities continue to focus on: Identifying Most Prevalent and Threatening Contaminant Risks; UST/LUST Data Evaluations; Non-Petroleum Data

Evaluations; School Outreach; GPS Well Project; and CWS Database Queries. ADEQ maintains its commitment to prioritizing source water protection for schools. Not only are these small public water systems high-risk systems, they are also facing severe resource issues. ADEQ believes the best way to protect children and the public at large is to identify and prevent issues before they become public health problems. This program for ADEQ has been so successful that it was showcased to Jared Blumenfeld, Regional Administrator for US EPA Region IX in February. The local White Mountain Independent paper ran a story on the RA's visit to the school highlighting the need to protect drinking water wells.

#### *Concerns:*

There are no concerns, but EPA has asked ADEQ to coordinate with ADEQ CWA programs to protect sources of drinking water.

#### *Follow-up Actions:*

The Program began coordinating with the ADEQ NPS Program to locate community water systems in priority watersheds. The Program also included coordination with CWA programs in their FY16 work plan. EPA will continue to help the Program consider other CWA tools to minimize potential contamination threats to sources of drinking water.

### **Ground Water Program**

ADEQ does not have an EPA-approved Underground Injection Control (UIC) State permitting program. ADEQ's Aquifer Protection Permit (APP) program shares information with EPA's UIC program on UIC regulated sites that are also subject to state APP permitting. Sharing of information and regular updates allows EPA to improve on the Federal oversight and our permitting process, where appropriate.

ADEQ has shared information with us specifically on the permitted Morton Salt facility and the proposed Florence Copper Production Test Facility (PTF). The proposed PTF is under consideration for a federal UIC permit and a highly opposed project by the Florence community. Receiving updates from ADEQ has slowed down during this grant year.

ADEQ also works with Arizona Department of Water Resources (ADWR) to evaluate potential for adverse impacts to groundwater quality from recharge injection wells or recharge basins. Recharge is a means of storing excess water supplies underground so that they may be used in the future. ADWR encourages treated wastewater to be reused in this way to replenish groundwater supplies. Both ADWR and ADEQ's APP program have permitting requirements for injection of treated wastewater used for aquifer recharge and recovery. ADEQ's APP program evaluates these projects and requires an APP, unless exempted, to protect the receiving aquifer from potential contaminants. EPA's UIC receives information from ADEQ on the reviews of these recharge projects to ensure that the injection of treated wastewater meets our UIC requirements for Class V injection wells. The updated information on the latest projects was acceptable.

In addition to coordinating on permitting projects, ADEQ has provided annual updates to EPA of its drywell (Class V injection wells) database for EPA's national UIC database. A person, who

owns an existing or proposed drywell in Arizona, must register the drywell with ADEQ. ADEQ's APP Program evaluates these wells to determine the need for a general APP to protect Arizona aquifers that serve as drinking water sources. EPA also requires owners/operators of injection wells (ie, drywells or any other Class V injection well), which are "authorized by rule" pursuant to the Class V UIC requirements, to submit inventory information for the federal database. The drywell update from ADEQ ensures that our UIC database is up-to-date for this type of well. ADEQ drywell information was provided to our database manager in an acceptable format.

#### *Follow-up Actions:*

EPA's UIC and ADEQ's APP programs agreed to arrange a monthly conference call for more frequent updates on our common projects.

### **Drinking Water Enforcement**

The Compliance Section along with the Southern Regional Office Compliance Program Unit (SROCU) in Tucson is responsible for sanitary surveys, compliance and enforcement and works closely with the Drinking Water Section.

The FY 2015 OECA Annual Commitment System (ACS) commitment for drinking water requires that states address the number of priority systems equal to the number of its Public Water Systems (PWSs) that have a score of 11 or higher on the July 2014 Enforcement Targeting Tool (ETT) report by issuing a formal enforcement action or verifying return to compliance. Systems with an ETT score of 11 or higher, with unaddressed violations for more than six months are potential candidates for escalated enforcement actions. ADEQ's success at addressing violations is tracked by means of the quarterly ETT reports. At the beginning of FY 2015, there were 96 facilities with a score of 11 or higher. ADEQ addressed 71 PWSs in this group (with an ETT score of 11 or higher) by the end of FY 2015.

ADEQ issued 113 informal enforcement actions (Notices of Opportunity to Correct [NOCs] and/or Notices of Violations [NOVs]) to PWSs to address non-compliance issues. ADEQ closed 117 NOCs/NOVs that were issued previously. ADEQ also issued nine administrative orders, including for PWSs with arsenic MCL violations. Two civil complaints (i.e., referred to State AG) were issued to PWSs that violated compliance schedules in previously issued administrative orders. Finally, seven administrative orders were closed when the water systems returned to compliance.

ADEQ conducted and completed sanitary surveys on 4 surface water systems, 60 groundwater (community systems), 73 groundwater (non-community systems), and 14 outstanding water systems. (Note, outstanding water systems are those systems (groundwater sources) with no significant deficiencies identified, as well as no major violations, after their routine water system survey, and thus their survey frequency has been reduced from every 3 years to every 5 years).

During the week of September 26, 2015, EPA Region 9 Drinking Water Enforcement Officers (Hillary Hecht and Patrick Chan) conducted an enforcement data verification audit of ADEQ and Maricopa County's drinking water programs. EPA reviewed facility files for 11 public water systems to help determine how PWSs were reporting compliance information and how ADEQ

determines and tracks possible violations. EPA expects to complete the audit report by December 2015.